

State of Colorado

Oil and Gas Conservation Commission

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Document Number:

403091437

(SUBMITTED)

Date Received:

08/16/2022

APPLICATION FOR PERMIT TO

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and OperateAmend ☐TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER: _____Refile ☒ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: BJU M23A FEDWell Number: 24B-22-496Name of Operator: CAERUS PICEANCE LLCCOGCC Operator Number: 10456Address: 1001 17TH STREET #1600City: DENVERState: COZip: 80202Contact Name: Reed HaddockPhone: (720)880-6369Fax: (303)565-4606Email: rhaddock@caerusoilandgas.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

☐ The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): _____

Federal Financial Assurance

☒ In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)Amount of Federal Financial Assurance \$ 10093

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWSW Sec: 23 Twp: 4S Rng: 96W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 1303 Feet FSL 1293 Feet FWLLatitude: 39.684145Longitude: -108.140817

GPS Data:

GPS Quality Value: 1.4Type of GPS Quality Value: PDOPDate of Measurement: 08/04/2022Ground Elevation: 8109Field Name: GRAND VALLEYField Number: 31290Well Plan: is ☒ Directional ☐ Horizontal (highly deviated) ☐ Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 22 Twp: 4S Rng: 96WFootage at TPZ: 1870 FSL 1257 FELMeasured Depth of TPZ: 8499True Vertical Depth of TPZ: 8030 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)Sec: 22 Twp: 4S Rng: 96WFootage at BPZ: 1836 FSL 1352 FELMeasured Depth of BPZ: 12153True Vertical Depth of BPZ: 11683 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 22 Twp: 4S Rng: 96WFootage at BHL: 1836 FSL 1352 FEL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATIONCounty: GARFIELD Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of §

24-65.1-108 C.R.S.? No

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? ☐ Yes ☒ No☐ If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The disposition of the application filed with the Relevant Local Government is: _____ Date of Final Disposition: _____

Comments: Caerus Piceance LLC has contacted Garfield County, the local government with jurisdiction over the siting of this proposed oil and gas location and determined that per the Garfield County Land Use and Development Code, Table 3-403, "Oil and Gas Drilling and Production" and "Hydraulic Fracturing, Remote Surface Location" are a use by right or Exempt from Land Use Regulation at this site. Garfield County's disposition is not required for the purposes of this submittal.

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATIONSurface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ IndianMineral Owner beneath this Well's Oil and Gas Location: ☐ Fee ☐ State ☒ Federal ☐ Indian

Surface Owner Protection Bond (if applicable): _____ Surety ID Number (if applicable): _____

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- ☐ Fee
☐ State
☒ Federal
☐ Indian
☐ N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

Sec. 22 T4S-R96W - All and other lands.

Total Acres in Described Lease: 2425

Described Mineral Lease is: ☐ Fee

☐ State

☒ Federal

☐ Indian

Federal or State Lease # COC064814

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
Public Road: 4724 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 4059 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit – as defined in 100 Series Rules.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
WILLIAMS FORK	WMFK	1-229		

Federal or State Unit Name (if appl): Big Jimmy

Unit Number: COC074105X

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 3452 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 311 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: Feet

Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers.

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 12653 Feet

TVD at Proposed Total Measured Depth 12183 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: _____ Feet ☒ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H₂S Drilling Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? No

BOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ None

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	30	20	A252	54#	0	100	218	100	0
SURF	14+3/4	9+5/8	J55	36#	0	3000	710	3000	0
1ST	8+3/4	4+1/2	HCP110	11.6#	0	12653	1447	12653	3500
		9+5/8		Stage Tool	0	1400	312	1400	0

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Green River	0	0	3500	3332	501-1000	CGS	
Confining Layer	Wasatch	3507	3338	6077	5738			
Hydrocarbon	Wasatch G	6077	5738	6398	6038			The Wasatch G is a non-productive zone in the referenced area of the basin.
Confining Layer	Fort Union	6398	6038	8499	8030			
Hydrocarbon	Ohio Creek	8499	8030	8905	8436	>10000	Produced Water Sample	
Hydrocarbon	Williams Fork	8905	8436	11653	11183	>10000	Produced Water Sample	
Hydrocarbon	Cameo	11653	11183	12153	11683	>10000	Produced Water Sample	
Hydrocarbon	Rollins	12153	11683	12653	12183	>10000	Produced Water Sample	

OPERATOR COMMENTS AND SUBMITTAL

Comments: The M23A-496 Pad is in the process of being built and has a valid Form 2A that expires October 12, 2023. The previously submitted directional plans, location survey plats, and casing design have been revised. The Operator, Caerus Piceance LLC is the surface owner.

This application is in a Comprehensive Area Plan _____ CAP #: _____

Oil and Gas Development Plan Name _____ OGDID #: _____

Location ID: 478266

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____

Print Name: Reed Haddock

Title: Regulatory Lead

Date: 8/16/2022

Email: rhaddock@caerusoilandgas.co

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____

Director of COGCC

Date: _____

Expiration Date: _____

API NUMBER

05 045 24368 00

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

COA Type

Description

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Best Management Practices

No BMP/COA Type	Description
1 Planning	Alternative Logging Program: The first well drilled on the pad will be logged with openhole resistivity log with gamma-ray log from TD into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs will state Alternative Logging Program No open-hole logs were run.
2 Planning	The associated well pad Location ID: 478266 was approved on October 13, 2020, by the COGCC. The BLM White River Field Office (WRFO) approved the Application for Permit to Drill (APD) for this well on December 1, 2020, under the land use planning review of the WRFO Record of Decision and Approved Resource Management Plan (ROD/RMP), as amended by the WRFO Oil and Gas Development Plan Approved Resource Management Plan Amendment and the Northwest Colorado Greater Sage-Grouse Approved RMPA. Please reference the attached WRFO Environmental Assessment from November 2020 and the Decision Record approved by the WRFO BLM on November 25, 2020, which specifically addresses the criteria in which the associated well pad was evaluated and approved.
3 Drilling/Completion Operations	<p>Closed loop system will be used.</p> <p>DRILL CUTTINGS: The moisture content of all drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. All cuttings generated during drilling will be placed in a bermed portion of the well pad prior to onsite beneficial reuse.</p> <p>Drill cuttings will be put through shakers to minimize moisture and analyzed for Table 915-1 constituents. Cuttings that meet 915-1 levels will be backfilled into the cuttings management area along the northwestern portion of the pad.</p> <p>CONTAINMENT: During drilling activities, Caerus utilizes a portable containment liner under the substructure of the drilling rig during drilling activities to protect shallow groundwater from any potential spills surrounding the rig during drilling. A liquid release would simply be vacuumed up from the liner. When drilling activity is completed, the liner is removed and transferred to the next drilling location. For permanent containment at the oil and gas location Caerus will ensure 150% secondary containment of volume in the single largest tank on the oil and gas location in compliance with Rule 603.o. During completions, Caerus may utilize 15-20 temporary tanks to hold frac fluid and flowback water. Tanks would be housed in a compacted earthen bermed area and secondary containment.</p> <p>FLOWBACK & STIMULATION: As wells progress from the drilling stage to the completions stage temporary working tanks will be situated on the ELU A18-495 Well Pad. Caerus estimates that there could be 15-20 500-bbl tanks on location for roughly 18-months as the wells progress from the drilling to completions stage during Sim-Ops. The contents of the tanks will contain produced water. The temporary tanks will be placed on a certain portion of the ELU A18-495 Well Pad and laid upon an impervious synthetic or engineered liner which would be underlaid by road base. The liners will be sufficient to hold up to 150% of the largest tank on the location. Note, the entire Oil and Gas Location for the ELU A18-495 will include a compacted earthen berm perimeter around the operational area for ELU A18-495 Well Pad. Once the working tanks are no longer necessary for operations both the tanks and the impervious liner will be removed.</p>

Total: 3 comment(s)

Attachment List

Att Doc Num	Name
403124757	DEVIATED DRILLING PLAN
403124758	DIRECTIONAL DATA
403131667	WELL LOCATION PLAT
403137812	OffsetWellEvaluations Data

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)



Public Comments

No public comments were received on this application during the comment period.

